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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/601,467	06/23/2003	Brian A. Wims	GP-302957 (2750/30)	7224

7590 07/08/2005
General Motors Corporation
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EXAMINER

NGUYEN, TUNG X

ART UNIT	PAPER NUMBER
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2829

DATE MAILED: 07/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/601,467	WIMS ET AL	
	Examiner	Art Unit	
	Tung X. Nguyen	2829	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.135(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 April 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 June 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-7, 10, 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Admitted Prior Art (heretoafter APA) in Fig. 1, in view of Cook et al. (u.s.p 4,771,234).

As to claims 1, 5, 12, APA in Fig. 1, a system for testing electronic module comprising: at least one electronic modules' box (cover of 130) including at least one harness port (190); at least one harness with a generic harness (120, cable) operably connected at one end to the at least one harness port (190); APA does not disclose a mapping board box. However, Cook et al. disclose in Figs. 1-2, the mapping board box (501, 500 of figure 1) for pre-wiring and receiving the circuit board (105) with a variety of pin configuration (col. 3, lines 60-67); wherein the mapping board box having a plurality of pin receptors (holes of 501) in communication with the electronic modules (elements on the board 105), and the circuit board (105). Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the system of APA, and providing the mapping board box, as taught by Cook et al for pre-wiring, receiving the circuit board (64) with a variety of pin configuration, and easily connecting/removing to the tester while testing the electronic modules.

As to claim 2, Cook et al. disclose in Fig. 1, the dimensions of the at least one mapping board box (501, 500 of figure 1) are sized to fit a printed circuit board (105 of figure 1).

As to claims 3-4, 6, APA in view of Cook et al disclose all of the limitations except for the at least one harness port comprises 56 pins, and/or the at least one mapping board box comprises 560 pin receptors. It is a well known that the harness port comprising 56 pins and the mapping board box having 560 pin receptors for transmitting and receiving all of kinds data at the same time. However, it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

As to claim 7, APA discloses the system further comprising an electronic simulators (140 of figure 1).

At to claim 10, Cook et al disclose the steps of a circuit (105 of figure 1) and the module (elements on 105) communicates via the mapping board box (501, 500 of figure 1) and a harness connection (114 of figure 2).

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 8-9, 11 is rejected under 35 U.S.C. 102(b) as being anticipated by Cook et al. (u.s.p 4,771,234)

As to claim 8, Cook et al disclose in Fig. 1, the method comprising steps of: a circuit board (105 of figure 1) corresponding to an electronic module (element on 105 of figure 1) via pins (110 of figure 1); and the circuit board (105) inserting into a pre-wired mapping board box (501, 500 of figure 1).

As to claim 9, Cook et al. disclose in Fig. 1, the steps of receiving the pinned portion (110 of figure 1) of the board (501) into connection port (pins of elements of 105) in a mapping board box (501, 500 of figure 1)

As to claim 11, Cook et al disclose in Fig. 1, the system for test an electronic module comprising: means (501 of figure 1) for receiving a circuit board (105 of figure 1); means (110, 500 of figure 1) for communicating between the circuit board (105 of figure 1) receiving means (501) and an electronic module (elements on 105).

Response to Arguments

5. Applicant's arguments filed 4/25/05 have been fully considered but they are not persuasive.

As to claims 1-11, in re pages 7-8, applicant argues that Cook fails to disclose a mapping box including a plurality of pin receptors in electronic communication with the at least one harness port"; and further there can be no motivation to combine to the references.

In response, as to claims 1-11, the examiner points out that the claim said "the mapping board box including a plurality of pin receptors". The claim does not state what the plurality of pin receptors is. Thus, Cook clearly disclose in Figs. 1-2, the mapping board box (501, 500 of figure 1) for pre-wiring and receiving the circuit board (105) with

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a variety of pin configuration (col. 3, lines 60-67); wherein the mapping board box having a plurality of pin receptors (holes of 501) for guiding the pin (110 of figure 1) to contact the components (115 of figure 2) located on a circuit card (105 of figures 1-2) respectively. Therefore, the mapping box (501, 500 of figure 1) of Cook et al include a plurality of pin receptors in communication with the electronic modules (elements on the board 105), and the circuit board (105).

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Cook et al's test fixture (figures 1-2) also use for testing or determining whether each electronic component on the circuit card to be operating properly (col. 1, lines 15-25).

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

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mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tung X. Nguyen whose telephone number is (571) 272-1967. The examiner can normally be reached on 8:30am-5:00pm M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor Ramirez can be reached on (571) 272-2034. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TN
06/28/05


VINH NGUYEN
PRIMARY EXAMINER
A.U. 2829
07/06/05